



July 26, 2012

Chet Epperson, Chief of Police
Rockford Police Department
Rockford, IL 61103

Dear Chief Epperson:

At your request I have prepared a patrol staffing analysis for the Rockford Police Department. In this analysis I examined the time period of July 1, 2011 through June 30, 2012. During this time period there were 93,195 dispatched calls for service. During the time period of my previous analysis (September 1, 2009 through August 31, 2010) there were 101,171 calls for service, or about eight percent more calls for service. Based on 93,195 calls for service per year RPD responds, on average, to 255 calls per day, or about 11 per hour.

In the first part of the analysis I examined the distribution of calls for service by hour of day. These results are illustrated in figure one. This distribution is very similar to that found in prior years.

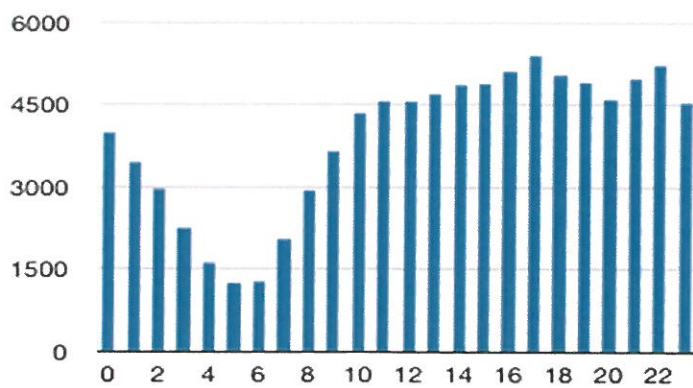


Figure 1 Dispatched Calls for Service by Hour of Day

We now turn to the staffing estimate. This analysis is based on the following steps:

1. Estimating the number and time consumed on calls for service
2. Calculation of a shift-relief factor
3. Establishing performance objectives.

Table one illustrates our estimate. We have based the analysis on three eight-hour shifts. Column 1 shows the shift times and column 2 shows the number of calls during those time periods.¹

1	2	3	4	5	6	7	8
Shift	CFS	25% Backup	Time Hours	Units on duty	(XRF) 1.7	50% Discretionary	66% Discretionary
0000-0759	18858	23572	15557	5.3	9	18	27
0800-	34520	43150	28479	9.6	16	32	48

¹ Unlike prior analyses we have not attempted to extract traffic accidents from this data.

1559							
1600- 2359	39817	49771	32849	11.2	19	38	57
						88	132

Table 1 Staffing Estimates for Eight-Hour Shifts

In column 3 we adjust the number of calls for backup units. In this case we assume that 25% of calls require a backup unit and that the backup unit remains at the scene for the duration of the call. In column 4 we convert the number of calls to hours, based on an average time of 40 minutes per call. In column 5 we divide the total time consumed by 2920, the total number of hour an officer would work if they worked eight hours a day and 365 days per year. In column six we multiply the unit number by a shift relief factor of 1.7. This tells us the number of officers that should be assigned to a shift to ensure that a sufficient numbers of officers will appear for duty. In columns 7 and 8 we illustrate the number of officers that should be assigned to the shifts if the department sought to provide 50% and 66% (respectively) time for discretionary activities.

	Patrol Nights	Patrol Days	Patrol Afternoon	Day Cover	Traffic Day	Traffic Afternoon	Traffic Nights	Total
0	41		39				4	84
1	41		39				4	84
2	41						4	45
3	41						4	45
4	41						4	45
5	41							41
6	41	38			5			43
7		38			5			43
8		38			5			43
9		38		14	5	4		61
10		38		14	5	4		61
11		38		14	5	4		61
12		38		14	5	4		61
13		38		14	5	4		61
14		38		14	5	4		61
15		38		14	5	4		61
16			39	14		4		57
17			39	14		4		57
18			39	14		4		57
19			39				4	43
20			39				4	43
21	41		39				4	84
22	41		39				4	84
23	41		39				4	84

Table 2 Patrol and Traffic staffing 7/10/12

Table two illustrates current staffing levels for RPD patrol and traffic. Given that the current staffing of patrol is 132 (146 with traffic officers), the department is well positioned to handle calls for service and to perform a wide range of discretionary activities.

In Figure two we compare the recommended staffing on three eight-hour shifts with the current staffing.

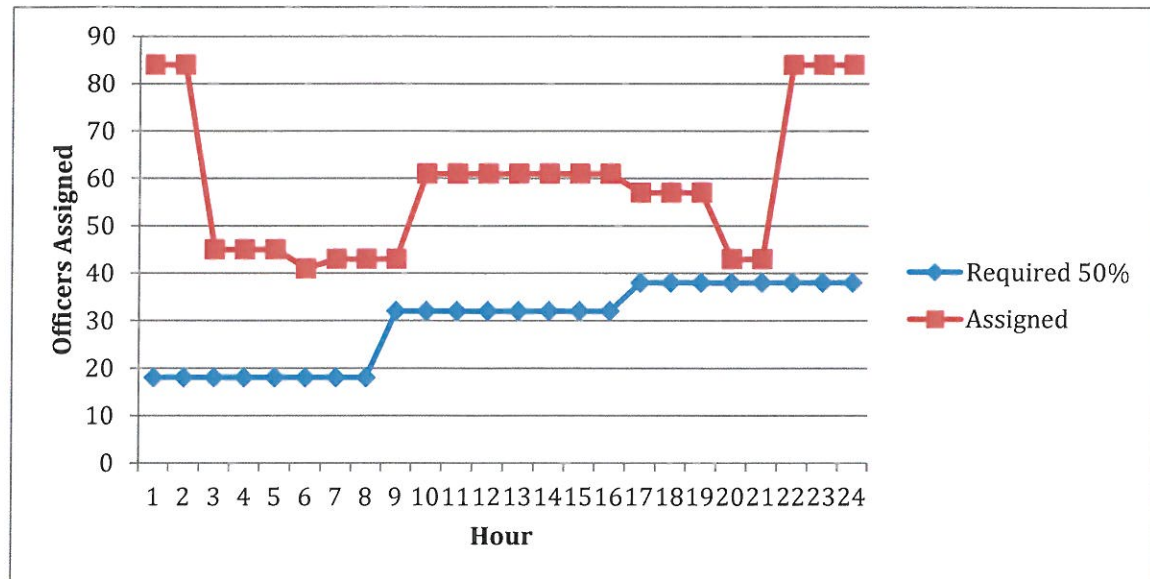


Figure 2 Recommended Staffing vs. Actual Staffing

Figure three compares the distribution of calls for service by hour of day with the current patrol and traffic staffing.

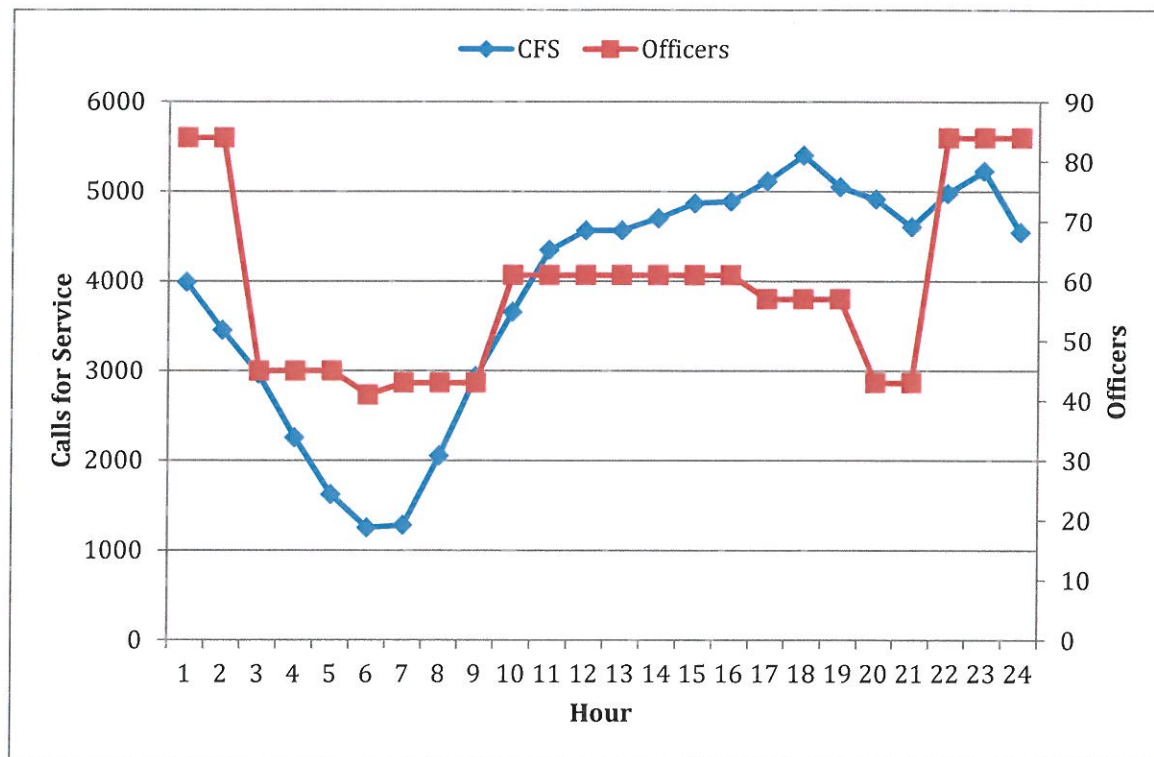


Figure 3 Distribution of CFS vs. Assignment by Hour

Finally, we have constructed a staffing estimate based on the use of 12-hour shifts. The model is similar except we adjust for a different shift relief factor. As you can observe, the number of officers required under this estimate is the same as that prepared for three eight-hour shifts.²

Shift	CFS	25% Backup	Time (Hours)	Units	(XRF) 2.5	50% Discreti onary	66%
0600- 1759	48362	60452	39898	9.1	23	46	69
1800- 0559	44833	56041	36987	8.4	21	42	63

² This schedule will result in a 42-hour workweek. Thus there must be an adjustment so as to conform to FSLA.

[illegible]

Please contact me if you have any questions concerning this analysis.

Sincerely,

attn: W

Alexander Weiss, PhD